

Patent claims

1. A method for communication and/or transmission of information (8)

5 between automation devices (1<sub>1..n</sub>) via a data transmission system (2),

• in which each participating automation device (1<sub>i</sub>) sends and/or receives requests and/or replies, and

• in which the communication and/or transmission of information (8) takes place directly between the automation devices (1<sub>1..n</sub>),

10 characterized in that

the automation devices (1<sub>1..n</sub>) send an address (7) directly to the automation device (1<sub>i</sub>) which submits the request (6).

2. The method according to Claim 1,

15 characterized in that

the communication between the automation devices (1) takes place in the form of peer-to-peer communication.

3. The method according to Claim 1 or 2,

20 characterized in that

the communication and/or transmission of information takes place via an Intranet and/or Internet (3).

4. The method according to one of the Claims 1 to 3,

25 characterized in that

communication takes place via a basic service of an operating system.

5. The method according to one of the Claims 1 to 4,

30 characterized in that

each automation device (1<sub>i</sub>) sends a request (6) via the data transmission system (2) to all other automation devices (1<sub>1..n</sub>) of which it has knowledge.

6. The method according to one of the Claims 1 to 5,  
characterized in that

5 all automation devices ( $1_{1..m}$ ) forward a request (6), which arrives  
via the sending and/or receiving means (4), to all other automation  
devices which it knows ( $1_{m+1..n}$ ), which have not yet received the  
request (6).

10 7. The method according to one of the Claims 1 to 6,  
characterized in that  
the automation devices ( $1_{1..n}$ ) directly collect information (8) from  
automation devices ( $1_{1..n}$ ) which make information (8) available at the  
address (7) which has been sent.

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8. The method according to one of the Claims 1 to 7,  
characterized in that  
the forwarding of the request (7) through the automation devices  
( $1_{1..n}$ ) is canceled on the basis of a time limit.

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9. The method according to one of the Claims 1 to 8,  
characterized in that  
the addresses (7) of the participating automation devices ( $1_{1..n}$ ) are  
managed by a device (5) which is connected to the data transmission  
25 system (2).

10. An automation device ( $1_i$ ) for communication with and/or  
transmission of information (8) to and from further automation  
devices ( $1_{1..n}$ ) via a data transmission system (2),

30 • wherein the automation device ( $1_i$ ) has means (4) for sending  
and/or receiving requests and/or replies, and  
• wherein the means (4) are used for direct communication and/or  
transmission of information (8) between the automation devices  
( $1_{1..n}$ ),

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characterized in that  
the automation device (1<sub>i</sub>) is used for directly sending an address  
(7) to an automation device (1<sub>1..n</sub>) which submits a request (6).

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11. The automation device according to Claim 10,

characterized in that

the means (4) are used for peer-to-peer communication between the  
automation devices (1).

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12. The automation device according to Claims 10 or 11,

characterized in that

the means (4) for sending and/or receiving are developed as a basic  
service of an operating system for communication.

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13. The automation device according to Claims 10 to 12,

characterized in that

the automation device (1<sub>i</sub>) is used for sending a request (6) via the  
data transmission system (2) to all other automation devices (1<sub>1..n</sub>)

20 of which it has knowledge.

14. The automation device according to one of the Claims 10 to 13,

characterized in that

the automation device (1<sub>i</sub>) is used for forwarding a request (6),

25 which arrives via the sending and/or receiving means (4), to all  
other automation devices which it knows (1<sub>1..n</sub>), which have not yet  
received the request (6).

15. The automation device according to one of the Claims 10 to 14,

30 characterized in that

the means (4) for sending and/or receiving on the automation devices  
(1<sub>i</sub>) are used for the direct collection of information (8) from  
automation devices (1<sub>1..n</sub>) which make information (8) available at the  
address (7) which has been sent.

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16. The automation device according to one of the Claims 10 to 15,  
characterized in that

5 the request (7) has means for canceling its forwarding through the  
automation devices (1<sub>1..n</sub>) on the basis of a time limit.

17. An automation system having at least one automation device  
according to one of the Claims 10 to 16.

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18. The automation system according to Claim 17,  
characterized in that  
the data transmission system (2) is developed as an Intranet and/or  
Internet (3).

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19. The automation system according to Claim 17 or 18,  
characterized in that  
a device (5) which is connected to the data transmission system (2)  
is used for managing the addresses (7) of the participating  
20 automation devices (1<sub>1..n</sub>).